Applicant
 :
 Sun-Uk Kim et al.
 Attorney Docket No.: 76303-003US1

 Serial No.
 :
 10/560,023
 Client Ref. No.: OPP053249US

Filed : December 8, 2005 Page : 2 of 10

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims

 (Currently amended) A method for fabricating a porous silica sphere comprising:

heat-treating a silica gel by increasing its temperature at a speed of less-than $\underline{5}$ to 90° C per minute \underline{up} to 1050 [[or]] \underline{to} 1200° C; and

maintaining the temperature for a predetermined time, wherein the heat-treatment is performed in a rotary tube furnace.

- (Original) The method of claim 1, wherein the silica gel has pores with a size of about 20-70 angstroms, and a pore volume of around 0.3 to 1.1 mL/g.
 - 3. (Cancelled)
- (Original) The method of claim 1, wherein the heat-treatment is performed at an average temperature elevating speed ranging from 10°C to 70°C per minute.
 - 5. (Cancelled)
- (Currently amended) A method for fabricating a porous silica sphere comprising:

a heat treatment process, wherein silica gel is subjected to a first heat-treatment at 400 to 900°C, and is subjected to a second heat-treatment at 1050 to 1200°C in which the heat-treatment process is performed using at least two rotary tube furnaces and, in the first heat-treatment, the temperature in a first rotary tube furnace is increased at an average speed of 35 to 70°C per minute up to 700°C.

Applicant : Sun-Uk Kim et al.
Serial No. : 10/560,023
Filed : December 8, 2005
Page : 3 of 10

Attorney Docket No.: 76303-003US1 Client Ref. No.: OPP053249US

 (Original) The method of claim 6, wherein the first heat treatment is performed for 20 to 60 minutes, and the second heat treatment is performed for 20 to 60 minutes.

- 8. (Cancelled)
- 9. (Currently amended) The method of claim 6, which comprises putting the silica gel into a first tube furnace;

subjecting it to a first heat treatment by increasing the temperature at an average speed of 35°C to 70°C up to 700°C, and then maintaining it for 10 to 20 minutes; and subjecting it to a second heat treatment in the second tube furnace at 1100°C to 1150°C, and then maintaining it for 20 to 60 minutes wherein the silica gel is subjected to a second heat treatment, in a second rotary tube furnace, at a temperature of 1100 to 1150°C.